Teaching learning disability to undergraduate medical students

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The education of doctors shapes their professional identity: who they are and how they practise. Where does the issue of learning disability fit in? What is it and of what factors should doctors in training be aware?

The training of medical students has been defined by the General Medical Council (GMC; 1993) in broad terms, with ‘handicap, disability and rehabilitation’ highlighted as a specific curriculum theme alongside ‘public health’, ‘man in society’, ‘communication skills’ and other more clinical matters. The principal goal for undergraduate teaching is to create a multi-potential doctor, a sort of ‘stem cell’ doctor, who has the knowledge, understanding, skill and attitudes to operate as a pre-registration house officer (PRHO) and then to take any of the myriad choice of paths that lead from that point in terms of postgraduate training.

To prepare both for practice as a PRHO and the career choices that follow, there is a notion of a core curriculum for the immediate practice and a choice of special study modules to develop particular interests. The struggle of what is core and what can be left to student choice has been, and remains, complex. Over the past 10 years, there have been reviews of curricula, the London medical schools have merged and new medical schools are being developed. Medicine is not immune from the market forces that rule society (Smith, 1994). Experience comes from other parts of the English-speaking world and medical training does not escape globalisation (World Federation for Medical Education: http://www.sund.ku.dk/wfme).

The ‘tomorrow’ for new doctors is no longer what was imagined 10 years ago and the GMC is currently reviewing this (http://www.gmc-uk.org/). However, by the time its review passes through the committees, the revisions and the necessary parts of the system there will be those who will consider it out of date, while others will try to ground the profession on ageless virtues and core principles (McNaughton, 1996).

So where, in this ever-changing matrix in which we operate, is there time to teach medical students about learning disabilities? The starting point must be a justification for its inclusion and its relevance to tomorrow’s doctors. The best that we can guess is that handicap, disability and rehabilitation, as highlighted by the GMC, will be a constant feature of the human condition and one to which doctors rightly should attend. Asclepius, the Greek God of Medicine, is said to have had two daughters, Panacea and Hygea. Panacea, the cure, has become the darling of the age, but Hygea, who teaches lifestyles and healthy living, has much to offer; perhaps more fundamental values of how we should regard each other, whatever our differences. Belonging, acceptance and tolerance are critical issues when dealing with disability and difference.

The curriculum theme of handicap, disability and rehabilitation is very broad. Does it refer to people with learning disabilities or to people with strokes, head injuries, arthritic conditions, amputations or trauma? The list is long. Although this article focuses on learning disability and the role of psychiatry in teaching about this, there is a need to consider how the very different expressions of both mental and physical disability manifest themselves and to ask whether the profession is really giving justice to these issues. The introduction of disability-adjusted life-years (DALYs) as a measure of health draws attention to the seriousness of chronicity and...
questions our values (Arnesen & Nord, 1999). Health services and professions that train solely to cure people may loose their way when overwhelmed with demands for which there is no panacea.

The need for core teaching in learning disability

Justification must arise from the demand that is made of the doctor in practice as we judge it now and in the future. Let us consider some scenarios.

Case study 1

Dr A, a PRHO, has to admit a young man with Down’s syndrome who has a suspected appendicitis. The young man has limited speech and limited understanding; he is accompanied by carers who feel strongly that his rights to determine his own life, as far as possible, are paramount. The PRHO has to obtain a signed consent form.

Has Dr A acquired the skills to communicate with a person with speech difficulties and with poor understanding? Has he the ability to instil confidence by recognising the concerns of the patient and the carers? Does Dr A understand the issues surrounding consent and capacity?

Luckily, as a student, Dr A had spent an afternoon in a workshop with people with learning disabilities, several of whom had Down’s syndrome. He had enjoyed the interaction with them and had gained some insights into what it means to have a disability. At another point in the curriculum, there had been a visit to a residential home and discussion with carers about the rights of people with disabilities. In his first year, he had been given an introductory course on communication skills and visits to families and individuals with disabilities. In his psychiatry firm, there had been considerable discussion about capacity and consent.

In the population as a whole, 2.5% have an IQ below 70. The great majority will not be known to services, but many will have difficulties in understanding the complexities of hospitals, of what is expected from them in giving a history of illness and of giving consent; most will not be supported by carers.

Case study 2

Ms B, a medical student on a paediatric firm, becomes aware of a child with severe developmental delays in an out-patient clinic. The mother is distressed. The child, an odd-looking 2-year-old boy, does not have any words, babbles to himself and has only just begun to sit and have head control, smiling weakly when engaged strongly. Ms B wonders what is happening and what is the cause. This becomes an opportunity for many questions from the teacher and instruction in the investigation of the epidemiology and aetiology, treatment and long-term management of developmental delays.

In her reading, Ms B becomes aware of the family’s needs and recalls the mother’s distress. She wonders what help should be given. Is this the role of the doctor? In what ways should health services support this family? How will they link up with schools and social services, which might also have a role? Pushing these thoughts to the back of her mind, she concentrates on learning the 101 possible autosomal recessive conditions that might cause developmental delays.

Case study 3

After finishing his PRHO year, Dr X takes a job in an accident and emergency (A&E) department. In his second week, two members of staff bring a young man from a local hostel into the department. The man is struggling and needs to be held; he is shouting but his words are indistinct. The group are put in a side room and slowly the young man quiets. When Dr X has time to assess him, he is sitting, rocking gently, staring into space, giving nervous glances at Dr X, who is trying to ascertain what has happened. He learns that the young man has a severe learning disability, lives in a local hostel and does not usually talk. He is usually quite calm but this morning he was not his usual self. He did not go to his day centre but became very upset, running around and hitting members of staff. They called the general practitioner, who suggested taking him to casualty as a matter of urgency.

As a student, Dr X had been to a lecture on adults with autistic disorders and suspects that this young man has autism. He is about to call the duty senior house office (SHO) in psychiatry when he recalls that behavioural problems may have a physical cause. A thermometer strip quickly shows the young man is suffering from pyrexia and the next problem to be solved is how to manage him while investigations and an examination are carried out. Dr X also recalls that there are specialists in learning disability and he seeks their advice. Within half an hour, a community nurse specialist arrives to help determine the course of action to be taken.

Case study 4

Dr B has qualified and completed her registration year and now has her first job as an SHO in psychiatry. She is called to the A&E department to see a woman with severe depression who has attempted suicide. Dr B learns that the woman has two children, currently at school, and that her husband will not be home from work for several hours. One of the children has a severe disability and severe behaviour disorder.

Luckily, as a student, Ms B’s teachers in child development had focused on the need to consider the system in which she would find herself as a new doctor, rather than on details she would not remember. She does not feel out of her depth and is able to engage quickly with her patient, reassuring her about her children and the situation. She contacts
the social worker and suggests contact with the schools. The woman is admitted and later Dr B liaises with the child psychiatrists and the community paediatricians about the child with the disability, inviting relevant members of their multi-disciplinary teams and the social and educational services to the pre-discharge meeting. In discussion with her consultant, Dr B decides to take on the family for joint therapy with the social worker around the problems of having a disabled child.

The central issues in the case studies above are that, in preparation for practice, students need be introduced to the doctor–patient relationship and the psychosocial issues surrounding groups of patients. These are as fundamental as the physical treatment. For the PRHO, is knowing about the pathology underlying appendicitis more important than knowing how to clerk a patient with special needs?

The phenomena of developmental and learning disabilities are ubiquitous; they are recognised in all cultures as being related to health and well-being. In the UK, people with learning disabilities will be seen, from conception to death, by health specialists, just like the rest of us, but perhaps they will need some specialist services at various times in their lives or when specific problems manifest. In terms of medical specialities, paediatrics plays a principal role in early childhood, diagnosing and treating the causes of the developmental difficulties and starting specific interventions to reduce the disability. In later childhood, child psychiatry may play an increasing role for those with behavioural or additional mental disorders while, for adults, there is a specific speciality in the psychiatry of learning disability, considering the nature of long-term disabilities, therapeutic and systemic needs, and the relationship of these to mental health (Hollins, 2000).

Some of these issues should be taught as core curriculum, while some could be in special study modules. The emphasis in this paper is the core curriculum to be taught within a psychiatry firm.

The core curriculum

In a review of teaching disability and rehabilitation in UK medical schools, Kahtan et al (1994) identified a set of core objectives and the need to integrate these topics into clinical teaching, with greater emphasis on functional assessment in the physical examination and the use of standardised assessment instruments, such as activities of daily living. Their considerations covered all types of disability, including learning disability, and they emphasised the need for the teaching on these topics to be coordinated.

In a similar study looking specifically at learning disability, Lennox & Diggens (1999b) investigated teaching in Australian medical schools. Drawing from a group of experts in the field, they suggested an ideal curriculum, as displayed in Box 1.

Teaching strategies

Although this section will separately address the teaching of attitudes, skills and knowledge, they
are best taught together, as they appear in practice. A seminar or lecture may be a good format for factual information but there are also opportunities to convey attitudes and consider skills. Visits to clinics and services, and clerking and assessing patients with disabilities under supervision all provide direct opportunities for the three areas of learning. Problem-based learning and self-directed learning are also good vehicles for combining these issues.

**Attitudes**

The starting point for teaching medical students about learning disability is within the introductory course in the first year. Issues of communication, of difference and of chronicity are important basic concepts, and developing positive attitudes to people with complex problems is essential. There is evidence that the earlier in the course psychological concepts are introduced to students and the more integrated they are with other clinical learning, then the more confident PRHOs feel in dealing with these issues (Williams et al, 1997). The concern that students are overwhelmed by detail was part of the GMC’s motivation to change the curriculum so that students first become confident in talking to people about difficulties, including those with disabilities, and learn the facts later (Dillner, 1994).

People with disabilities can contribute actively to the teaching of medical students (Monroe, 1996). Meeting a group of people with learning disabilities who have positive images of themselves helps students to avoid equating disability with illness. The concept of ‘people first’ advocated by the organisation People First UK (http://www.peoplefirst.org.uk) has been a valuable message in establishing proper approaches to people with disabilities. Hall & Hollins (1996) describe the work of the Strathcona Theatre Company in running workshops for students. The actors with learning disabilities take turns to control games and other activities and they all demonstrate their abilities in social relationships. Sessions last a couple of hours and are greatly enjoyed by the students. They can be followed by discussion about the students’ own attitudes and how the workshop has influenced these. Changes in student attitudes can be measured after their participation in these sessions.

May et al (1994) described a teaching programme that was part of a behavioural sciences course, in which small groups of students were introduced to a similar number of people with learning disabilities and they were encouraged to talk to each other, initially in pairs. There was no introductory lecture; the seminar focused on getting to know each other. The participants with learning disability were prepared to some extent. This experience resulted in positive changes in attitude.

Andrew et al (1998) describe a teaching programme which introduced medical students to the concerns of families that have children with disabilities. This programme included formal teaching, video material and a series of home visits. Meeting a family, understanding the difficulties faced by parents, and learning to listen and demonstrate interested concern were seen as important goals. Evaluation showed increased awareness and understanding of these issues. The authors suggested that negative attitudes by doctors towards people with disabilities are likely to lead to less good treatment.

The crucial issues here are confidence and attitudes when dealing with people with disabilities so that, when there is a need to attend to their illness or to help them solve problems, this can be the main focus. Otherwise, negative attitudes lead to the risk that the person is not seen as deserving; and poor confidence leads to uncertainty and to poor judgement.

Should all teaching about learning disability be with a positive spin? Certainly, the initial purpose should be to dispel any negative feelings towards the patients themselves and the teaching should be enjoyable. The question is how to separate the condition from the person. The person is valued but the condition is not; but in disability, the condition almost becomes the person. There is sadness, loss, alienation and despair felt by people with disabilities and their families. This should be conveyed with dignity and understanding. Role-play, problem-based learning, videos and direct contact are all good instruments for this with proper space for discussion by the students.

**Skills**

Eddey et al (1998) describe the use of simulated patients with disabilities, such as cerebral palsy and learning difficulties, to teach students how to take histories from those with communication difficulties. His assessment demonstrated improved confidence and awareness of how to manage communication. This also allowed examination of mental states, but seeing real-life patients in their usual context is important.

Skills in examination, assessment and diagnosis of people with learning disability need some practice in a clinic or community setting. Arranging for students to meet those with disabilities, clerk them and present their cases in a group to each other allows a wide range of clinical matters to be
discussed in an afternoon. Having video clips of the people being interviewed allows all the students to feel some personal connection to the cases. Meeting with families also gives experience of how to gain relevant information from carers. These visits should be preceded by some instruction on history-taking and some role-play between the students.

**Knowledge**

Facts and figures are easily put into a seminar or lecture format, allowing an overview of issues such as aetiology, epidemiology and the concepts of disability. But how can the true nature of learning disability be conveyed to students? A key point is heterogeneity, the diverse nature of what we mean by this single label. This cannot be taught by words alone. Video footage allows students to see a range of people in a range of different settings: people with severe and profound disabilities, those with mild and moderate disabilities, those with multiple, sensory and physical disabilities in addition to learning disabilities.

Images of this nature should be sought with consent. Images should be positive, showing how active people can be and how, in the right social environment, positive interactions can occur even with those with the most severe disabilities. Visiting services for adults with learning disabilities is an essential part of this instruction. Students can meet with service users and service providers in day services and residential homes in the local community, with the more able service users acting as guides (Piachaud & Hassiotis, 1996).

Common health problems can also be described in a seminar or lecture. The importance of physical health care and the difficulties people with learning disabilities have in accessing health care should be highlighted (Aspray *et al*, 1999; Sellar, 2000). There is the opportunity for joint teaching as part of general practice, supported by learning disability professionals such as nurse specialists. The close association between epilepsy and learning disability may lead to joint teaching or at least some coordination with neurology specialists. The importance of physical and sensory disabilities needs to be highlighted.

Mental health and behavioural disorders are placed easily within the psychiatry curriculum and they become a major focus for teaching. However, it is important to put them into context. Good housing, relationships, meaningful activities and a valued role in society are necessary for good mental health (Department of Health, 2001).

The increased incidence of mental health problems in learning disability needs to be recognised (Reid, 1994), along with the significant number of people within mental health services who have severe mental illness and who also have intellectual difficulties (Hassiotis *et al*, 1999). The mental health of people with learning disabilities should be closely integrated with mental health teaching; for example lectures on schizophrenia should refer to the diagnostic difficulties in people with learning disabilities, rather than just keeping this for the ‘special lecture’. The role of mental health services and how people with learning disabilities access and are managed within these can be taught within seminar settings (Hassiotis *et al*, 2000), but they are best experienced directly by attendance at clinics within specialist learning disability services or by community visits with members of the learning disability teams.

Within the formal knowledge base, ethical issues such as sterilisation must be addressed, together with consent and capacity. The history of the concepts and terminologies and of society’s views of people with learning disability need to be considered, if briefly, linking these with the students’ personal attitudes.

**Organising teaching**

The teaching of learning disabilities must be coordinated throughout a medical school (Hollins, 1988; Kahtan *et al*, 1994) and an individual should be identified who has appropriate time, resources and experience to undertake this coordination. Where there are academic appointments in learning disability then this allows greater teaching time which is more appropriate (Lennox & Diggens, 1999a). An agreed set of training objectives should be established. As far as possible the teaching about learning disabilities should be integrated within the usual curriculum of each relevant department, although some special sessions which draw together the themes and linkages are important. The teaching of disability and rehabilitation must be considered as a whole, as there is evidence that these receive insufficient emphasis (Marshall & Haines, 1990). Medicine has a role in championing the needs of the marginalised (Smith, 1999).

The teaching of public health, paediatrics, general practice, neurology and psychiatry will all touch on the subject of learning disability. In their survey of Australian medical schools, Lennox & Diggens (1999a) found that the paediatrics department offered the greatest teaching time in developmental disabilities, where it was a major theme in the core curriculum (Haddad *et al*, 1997; Andrew *et al*, 1998).
There is an important overlap between child psychiatry and learning disabilities, especially in relation to pervasive developmental disorders and behavioural disorders. The increased interest and awareness of autism and related disorders demands that students have a reasonable knowledge of this area (Shah, 2001) and that there should be a coordinated approach between the relevant departments.

Teaching about adults with learning disability in the UK has traditionally come within the psychiatric curriculum, which was in part due to the significant bed-based service in the large hospitals. However, the clear aetiological link between brain biology and mental disorder, the increased incidence of mental and behavioural disorders, and the specialty of the psychiatry of learning disability, all make learning disabilities an essential part of psychiatric teaching.

The specialist in the psychiatry of learning disability is well placed to be the coordinator of learning disability teaching in the medical school, although others may also wish to contribute to that role. It is good to start with a definition of what is being taught in each department and who will take responsibility for the teaching. Getting agreement between departments on the aims and objectives of this teaching, deciding on the methods to be used and determining an overall strategy requires energy and organisation in bringing the relevant people together. It is essential that the person concerned has sufficient time and such a programme should be an aim of all academic psychiatry departments. As a minimum requirement, the organisers of the psychiatry teaching should liaise with the other relevant departments in the medical school and they should be involved in the coordinated teaching on disability.

The multi-disciplinary nature of the work, including the non-medical professions of nursing, psychology and therapies, lends itself to multi-professional learning. Such opportunities to teach with mixed professional groups are particularly relevant for special study modules (see Box 2).

Organising a special day on disability as part of the curriculum is a valuable way of bringing the relevant teachers together and it also provides a useful focal teaching point for the students. Encouraging student voluntary groups to befriend people with learning disabilities is a valuable way of generating interest and positive attitudes within the student body (Spectrum, at University College Medical School Union, London, is a good example of a befriending organisation).

A possible integrated model is displayed in Box 3, and Box 4 shows the teaching time needed in a psychiatry firm.

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**Box 2 Special events allow teaching across disciplines and professions**

*Special study modules*
- Mental health and learning disability
- Behavioural phenotypes
- Valuing people – implementation of policy
- Advocacy, users and carers
- Working with other disciplines and agencies
- Disability, illness and sickness – social roles and values

*Disability Day*
- An event celebrating people with disability

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**Box 3 Teaching about learning disability throughout medical school**

*Introductory course*
- Attitudes: Awareness of various types of disability
- Impact on quality of life
- Importance of multi-disciplinary health role

*First/Second year*
- Attitudes: Meeting people with disabilities
- Meeting families who have children with disabilities
- Skills: Communication
- Taking a history
- Knowledge: Behavioural sciences
- Development and disorders
- Problem-based learning

*Third year*
- Attitudes: Linking with a family for a year
- Knowledge: Lifestyles and service needs

*Fourth year firms*
- Paediatrics
  - Aetiology, treatments, screening, family issues
  - Child development, specialist services
  - Multi-agency, multi-disciplinary working
- General practice
  - General health issues, primary care delivery, access
- Public health
  - Screening, prevention, health education
- Psychiatric
  - See Box 4
Box 4 Teaching on the psychiatric firm

Seminar/Lecture 1
Overview of learning disabilities – attitudes and concepts
Epidemiology
Aetiology
Down’s syndrome
Autistic spectrum disorders
Behavioural phenotypes

Seminar/Lecture 2
Assessment
Services
Families
Advocacy
Access to health services

Seminar/Lecture 3
Mental health and illness
Behavioural disorders
Ethics
Capacity and consent
Patient management plans (PMPs) and MCQs
Half-day workshop with people with learning disabilities
Half-day visit to community services, hosted by people with learning disabilities
Half-day working with a community team

Assessment, examinations and multiple choice questions

Students should not be inert recipients of knowledge. Learning is best where there is interaction. To maintain the evolution of a programme, it is essential to seek the views of students on the relevance of the teaching and their interest and enjoyment of it. This can be done formally with a questionnaire or informally at the end of the sessions.

The main concern of students is to pass examinations. Unless learning disabilities is examined, there is little reason for students to bother with the subject. Some will do so through interest and some through diligence, but many will not attend lectures or sessions because these are not seen as contributing to the final result. One can hardly blame them. If the matter is not important enough to assess then it is not important to practice.

It is essential that the knowledge, skills and attitudes discussed in this article are assessed and contribute to the student’s passage through medical school. It would not be unreasonable for a person with learning disabilities or communication difficulties to be one of the clinical cases in any of the major specialities. This would be a real clinical problem which would test skills and attitudes. Students should be aware that their psychiatric case could be a person with a dual diagnosis of learning disability and mental illness.

Multiple choice questions (MCQs) are easy to set around the knowledge. It is most appropriate to integrate learning disability choices into general stems, rather than only having a set of learning disability questions. This paper finishes with some examples of MCQs that could be used in a teaching situation but will also test the reader’s knowledge of simple matters in learning disability and some of the issues I have raised.

References


General Medical Council (1993) Tomorrow’s Doctors. Recommendations on Undergraduate Medical Education. London: GMC.


— & — (1999b) Knowledge, skills and attitudes: Medical schools’ coverage of an ideal curriculum on intellectual


* indicates items of particular interest

**Multiple choice questions**

1. Learning disability is:
   a incompatible with independent living
   b primarily caused by autosomal recessive conditions
   c theoretically present in about 2.5% of the population
   d rarely associated with epilepsy
   e rarely diagnosed before the age of 5 years.

2. When teaching medical students about learning disability it is important to recognise that:
   a the majority of adults with an IQ below 70 are not known to learning disability services
   b an insignificant number of people with severe mental illness have learning difficulties
   c it is best to leave teaching about mental disorders to the last year of medical school when the students are a bit more mature
   d students’ attitudes to disability can be influenced by teaching
   e people with severe and moderate learning disability living in community settings are more likely to need medical attention than is the normal population.

3. You are a PRHO in psychiatry and you are asked to see a 20-year-old man with a moderate learning disability who is complaining of abdominal pain. Should you decide:
   a to talk to carers to get a full history?
   b not to talk to him in case it upsets him?
   c that more teaching in learning disabilities as a student would have been helpful?
   d to assess his capacity to consent?
   e that practice in taking histories from people with communication difficulties as a student would have been useful?

4. Medical students should have specific teaching about learning disabilities:
   a in their first-year introductory course
   b on all possible genetic causes for them
   c from people with learning disabilities
   d by considering detailed brain pathology
   e to create positive attitudes.

5. Surveys of medical schools show that:
   a learning disability is not uniformly taught
   b some schools have innovative and enjoyable teaching on disability that the students rate highly
   c academic appointments have no influence on the quality of teaching
   d disability and rehabilitation are given sufficient emphasis
   e there may be no coordinated teaching of disability.

**MCQ answers**

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